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REMARKS

Claims 1-2, 4-5, 7, 9-15, 19-25, 27, and 34-38 were previously presented. Claims 3, 6, 8, 16-18, and 26 are currently amended. Claims 28-33, 39-53 were previously canceled. New claims 54-59 are added. Accordingly, claims 1-27, 34-38, and 54-59 are pending examination.

Rejection of Claims 1 and 34 Under 35 USC §103

Independent Claims 1 and 34 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent number 6,001,503 (Hercamp) in view of U.S. Patent number 4,476,203 (Robert). In particular, the Office Action argues it would be obvious to use the epoxy of Robert in the battery of Hercamp.

The prior amendment argues that an inventor reviewing the cited art would not be led to make the modification proposed in the Office Action. The responding Office Action actually supports the Applicant's argument when it provides the following:

... the active material of Hercamp ... does not escape. In fact, if the electrode active material of Hercamp et al. was escaping, then the battery would not function.

However, Robert teaches that the reason you would use the epoxy is to prevent active material from escaping (C2, L1 and also at C2, L12). If the active material of Hercamp is not escaping as stated in the Office Action, then there is no reason to use Robert's epoxy and the cited art does not lead one to the claimed invention. For this reason alone, claim 1 is patentable over the cited art.

Additionally, the Applicant notes that the pending Office Action has not provided any motivation for making the modification proposed in the Office Action. The Office Action does state that it "would be advantageous to create the seal of Robert et al. in the separator of Hercamp et al. since the resin can be formed within the space already created ... the need for the extra machinery to create the seal is removed." This phrase argues that the proposed modification is not associated with a particular disadvantage (extra machinery). However, the reality is that the proposed modification is associated with multiple disadvantages. For instance, the proposed modification could lead to: lost energy density by adding the weight of the epoxy to the battery; increased materials cost

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by adding the cost of the epoxy to the battery; increased battery cost as a result of adding time-consuming steps to the battery fabrication process; and increased battery fabrication time by adding complexity to the battery fabrication process. Inventors confronted with these disadvantages will not make the proposed modification unless the proposed modification unless some affirmative gain results from that modification. The Office Action has not set forth any sort of gain associated with the proposed modification. Because the lack of motivation for the proposed modification will be central to the appeal of this application, the Applicant respectfully requests that the Examiner provide a motivation for making the proposed modification as required by the attached memorandum.

Additionally, the cited art provides no direction as to how make the modification proposed in the Office Action. For instance, the Office Action appears to be arguing that the epoxy of Robert would be pored into the gap between Hercamp's electrode and the sites 30 where the separator is bonded to itself. However, the cited art provides no direction as to how this would be done without the epoxy flowing between the "electrochemically active material 18" and the separator material. The location of the epoxy on the surface of the "electrochemically active material 18" would adversely affect the performance of the battery by disrupting the interface between the electrolyte and the "electrochemically active material 18." As a result, the proposed modification is not associated with the "expectation of success" required for a proper obviousness rejection.

Rejection of Claim 14 Under 35 USC §102(b)

Claim 14 stands rejected as being anticipated under 35 USC §102(b). Claim 14 specifies that that "the seams defining a perimeter of a pocket that surrounds the electrode." However, Hercamp teaches a separator that has an open top end as disclosed in Figures 2, 3, and C2, L36. Accordingly, Hercamp does not teach a pocket that surrounds the electrode.

An interpretation of the Hercamp separator as having a pocket that surrounds an electrode contradicts Applicant's specification. However, MPEP2111 requires an interpretation of claim language that is not inconsistent with the specification. The specification of the current application teaches that the pocket of Hercamp does not

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surround the electrode. For instance, Figure 2 includes a dashed line designated as representing the pocket (P 7, L2-3). The dashed line is shown surrounding the electrode and is described in the specification as surrounding the electrode (P7, L2). In contrast, the dashed line labeled P in Figure 1 is not shown surrounding the electrode and the pocket is not characterized as surrounding the electrode. As a result, the specification teaches that the seam arrangement of Figure 1 does not result in a pocket that surrounds the electrode. The seam arrangement of Hercamp can be analogized to the seam arrangement of the current application's Figure 1 but not to the seam arrangement of Figure 2. Since the seam arrangement of Hercamp can be analogized to the seam arrangement of Figure 1 and the specification teaches that the seam arrangement of Figure 1 does not result in a pocket that surrounds the electrode, the specification teaches that the seam arrangement of Hercamp does not result in a pocket that surrounds the electrode. As a result, interpreting the seam arrangement of Hercamp as surrounding the electrode is not consistent with the specification. Accordingly, Hercamp does not teach seams that define a perimeter of a pocket that surrounds an electrode as is claimed. Since Hercamp does not teach every element of claim 14, claim 14 is patentable over Hercamp.

Rejection of Claim 23 Under 35 USC §102(b)

Claim 23 stands rejected as being anticipated under 35 USC §103(a) as being unpatentable over Hercamp in view of U.S. Patent No. 5,674,641 (Cheu).

Claim 23 specifies "a tab opening extending through the tab and being open to an edge of the tab." Since neither Hercamp nor Cheu teach or suggest a tab opening extending through the tab and being open to an edge of the tab, the cited art does not teach or suggest every element of claim 23. Further, there is no motivation in either Cheu or Hercamp for modifying the tab of Cheu to have the claimed opening. Finally, the Office Action argues that the claimed tab opening is merely a change in the shape of the tab opening. However, the only limitation that the claim even arguably places on shape is that the opening is open to the edge of the tab. As a result, the opening can be square arced, triangular, wedge-shaped, etc., etc. As result, the claim does not limit the shape of the opening. Further, the claimed tab opening is a result of a stacking system and battery construction. As a result, the claimed opening is not merely a change in shape. Further,

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nothing in either Cheu or Hercamp suggests a stacking system or construction that would result in the claimed opening. For any one of these reasons, claim 23 is patentable over the cited art.

Rejection of Claims 2-13, 15-22, 24-27, 34-38, and 54-59

Since claims 2-13, 15-22, 24-27, 34-38, and 54-59 each depends from an Independent claim and each of the independent claims is believed to be in condition for allowance, these claims are also believed to be in condition for allowance.

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CONCLUSION

The Examiner is encouraged to telephone or e-mail the undersigned with any questions.

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MEMORANDUM

DATE: May 3, 2007

TO: Technology Center Directors

FROM: Margaret A. Focarino
Margaret A. Focarino
Deputy Commissioner
for Patent OperationsSUBJECT: Supreme Court decision on *KSR Int'l Co., v. Teleflex, Inc.*

The Supreme Court has issued its opinion in *KSR*, regarding the issue of obviousness under 35 U.S.C. § 103(a) when the claim recites a combination of elements of the prior art. *KSR Int'l Co. v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007). A copy of the decision is available at <http://www.supremecourtus.gov/opinions/06pdf/04-1350.pdf>. The Office is studying the opinion and will issue guidance to the patent examining corps in view of the *KSR* decision in the near future. Until the guidance is issued, the following points should be noted:

- (1) The Court reaffirmed the *Graham* factors in the determination of obviousness under 35 U.S.C. § 103(a). The four factual inquiries under *Graham* are:
- (a) determining the scope and contents of the prior art;
 - (b) ascertaining the differences between the prior art and the claims in issue;
 - (c) resolving the level of ordinary skill in the pertinent art; and
 - (d) evaluating evidence of secondary consideration.

Graham v. John Deere, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

- (2) The Court did not totally reject the use of "teaching, suggestion, or motivation" as a factor in the obviousness analysis. Rather, the Court recognized that a showing of "teaching, suggestion, or motivation" to combine the prior art to meet the claimed subject matter could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a).

- (3) The Court rejected a rigid application of the "teaching, suggestion, or motivation" (TSM) test, which required a showing of some teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the prior art elements in the manner claimed in the application or patent before holding the claimed subject matter to be obvious.

(4) The Court noted that the analysis supporting a rejection under 35 U.S.C. § 103(a) should be made explicit, and that it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. The Court specifically stated:

Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an **apparent reason** to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis **should be made explicit**.

KSR, slip op. at 14 (emphasis added).

Therefore, in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.